

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-119730

(43)Date of publication of application : 06.05.1997

(51)Int.Cl. F25B 9/00

F25D 11/02

F25D 17/08

(21)Application number : 07-299107

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(22)Date of filing : 24.10.1995

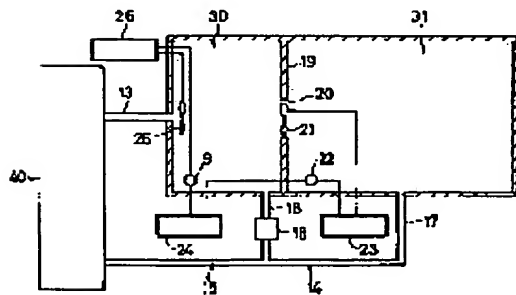
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(54) TWO-CHAMBER COOLER

(57)Abstract:

PROBLEM TO BE SOLVED: To efficiently cool a deep freezing chamber for containing frozen cargo such as icercream and a cold storage chamber for containing cargo such as vegetable and fruits by a refrigerator utilizing an air refrigerating cycle in a refrigerated truck.

SOLUTION: In an air cycle refrigerator 40, an air outlet is connected to a deep freezing chamber 30 via a low-temperature air exhaust tube 13, and an air inlet is connected to the chamber 30 and a cold storage chamber 31 via a return air supply tube 14. The tube 14 has a third return tube 15 connected to the air inlet of the refrigerator 40, a first return tube 16 and second return tube 17 branched from the



tube 15 and connected to the chamber 30 and the chamber 31. A throttle valve 18 is mounted at the tube 16, and a supply fan 21 for feeding the low-temperature air of the chamber 30 to the chamber 31 is provided at the opening 20 of a partition wall 19 for partitioning the chambers 30, 31. The valve opening of the valve 18 is controlled based on the temperatures of the chambers 30, 31, and the ON/OFF operation of the fan 21 is controlled based on the temperature of the chamber 31.